

Work Order ID 113850

February-24-14 10:05:04 AM

113850

Page 1

Item ID: D2667-1 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Saddle, LH, Aft, Out
 Start Date: 2/24/14 Start Qty: 4.00 ***4*** Cust Item ID:
 Required Date: 2/24/14 Req'd Qty: 4.00 ***4*** Customer:
 Reference:

Approvals: Process Plan: MLJ Date: 14-02-26 Tooling: _____ Date: _____
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____
 Run Start ***NR1***
 Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
D2667	Rev D

100	HAAS CNC VERTICAL MACHINING #1	0.00				4	1		<u>14-03-05</u>
-----	--------------------------------	------	--	--	--	---	---	--	-----------------

100
 HAAS 1
 HAAS CNC vertical machine #1

Memo
 Program batch number.1-Inspect part number and batch number are programmed correctly.3-Fixturing Inspection last completed on 14-03-04 by MLJ
 4-Machine Step No 1 of Folio and visually inspect as per attached Dimension Sheet 5-Machine Step No 2 of F

110	CONVENTIONAL MILLING MACHINE	0.00				4	0		<u>14-03-05</u>
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110
 Mill Conv
 Conventional Milling Machine

Memo
 Machine Keyway and inspect per attached dimension sheet

120	QC2- Inspect parts off machine FAI/FAIB	0.00				4	1		<u>14-03-05</u>
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120
 QC
 Quality Control

Memo
 Quality Control

W/O found in WF - no parts found close for

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____	DISPOSITION Rework ☐ Scrap ☒ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS			
Part No. _____		Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐
NCR No. _____		Machining ☒	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐
		Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐
		Large Fab ☐	Composite ☐	Supplier ☐	

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	14-03-04	100	1	Depth of .110 step and chamfer is out of tolerance (too deep) RC Program Error / Pusher not programmed to run + remove piece of mat.	DAS 12 9-89 14/3/5	chip got stuck under the part causing it to lift (Rougher didn't go deep enough and left a piece on the part that got jammed under when the 1" cutter finished the face) Adjust Program Add 0.0500 for 1st Run SCRAP + Destroy And Reorder 108298	14-03-04	14/03/07	DAS 16 9-89 14/03/05
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear	General		
☐ Bending	☐ Bend	☒ Folio/Program	☐ Outside Dimensions
☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance
☐ Cracks	☐ Broken/Damage/Defect	☐ Hardware	☐ Part Incorrect
☐ Crimp/Kink/Ripple/Wave	☐ Burrs	☐ Inspection Incomplete/Unqualified	☐ Part Lost/Missing
☐ Cuffs	☐ Contamination	☐ Instructions Incomplete/Unclear	☐ Part Moved
☐ Crushing	☐ Countersink	☐ Misaligned/off center	☐ Positioned Wrong
☐ Heat Treat	☐ Cut Too Short	☐ Mislabeled	☐ Power Loss/Surge
☐ Inspection Strip in Tube	☐ Drawing	☐ Misread	☐ Pressure/Forced
☐ Marks/Chatter	☐ Drill Holes	☐ Off-set	☐ Set-up
☐ Turning Sequence	☐ Finish	☐ Out of Calibration	☐ Temperature/Cure
☐ Wave/Twist in Tube	☐ Fit/Function	☐ Out of Sequence	☐ Weld
			☐ Wrong Stock Pulled
			☐ Other

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Page 2

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 Revision ID: Stop *NS2*
 Item Name: Saddle, LH, Aft, Out
 Start Date: 2/24/14 Start Qty: 4.00 *4* Cust Item ID:
 Required Date: 2/24/14 Req'd Qty: 4.00 *4* Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130 *130* QC Quality Control	QC8- Inspect parts - second check Memo	0.00 0.00	Cmk 14/03/07			4	0		
140 *140* HandFinish Hand Finishing	Chemical Conversion Coat per QSI005 4.1 Memo	0.00 0.00				4	2/24/14		
150 *150* Powdercoat Powder Coating	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum m128027 Memo START TIME: 11:20 OVEN TEMPERATURE: 10:40 FINISH TIME: 3200	0.00 0.00				4	0		man 6 14/03/16

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. <u>14-3657</u>	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Crosstube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐
---	--	---

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design ☐			14	Found that Power coat build up around Plugs Plug hole and Power coat is thin in some areas. Re employee was not correctly trained on how to correctly Power coat - (see see PAK NCR 14-3657)		Strip entire SAPH. 44			
Doc/Data ☐						Re glaze if necessary as per AS2005			
Equip/Tooling ☐						Re Power coat as per AS2005			
Handling/Pre ☐						Start Fin			
Material ☐						temp temp			
Operator ☐									
Offset/Setup ☐									
Process ☐									
Supplier ☐									
Training ☐									
Transport ☐									
Unapproved ☐									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence
☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge		
☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other		

Work Order ID 113850

February-24-14 10:05:04 AM

113850

Page 3

Item ID: D2667-1

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Saddle, LH, Aft, Out

Start Date: 2/24/14

Start Qty: 4.00

4

Cust Item ID:

Required Date: 2/24/14

Req'd Qty: 4.00

4

Customer:

Reference:

Approvals:

Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start ***NR1***

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

160

QC3- Inspect Part Finish

0.00

160

QC

Memo

0.00

Quality Control

170

Identify as per dwg & Stock Location: _____

0.00

170

Packaging

Memo

0.00

Packaging

180

QC21- Final Inspection - Work Order Release

0.00

180

QC

Memo

0.00

Quality Control

W1502-27

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width:100%;"> <tr> <td>Skid-tube ☐</td> <td>Crosstube ☐</td> <td>Water Jet ☐</td> <td>Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>	Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐															
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Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence
		☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge
		☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other

Picklist Print

Page 1

February-24-14 10:05:03 AM

Work Order ID: 113850

113850

Parent Item: D2667-1

D2667-1

Parent Item Name: Saddle, LH, Aft, Out

Start Date: 2/24/14

Required Date: 2/24/14

Start Qty: 4.00

Required Qty: 4.00

Comments: IPP: C00.11.01Removed P/O for Powder Coat - in house processEC
IPP Rev:D As per Rev D 07-03-19 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D6101-003		Manufactured	No			100	Each	31.0000	1	4			

D6101-003

Saddle Billet, 7075

SL 14-3-2

Location

Loc Qty

Loc Code

MAT045

31

108298

12

109528

7

111016

8

112456

4

4 +1 SL 14-03-05

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube ☐</td> <td>Crosstube ☐</td> <td>Water Jet ☐</td> <td>Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>	Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐															
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Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
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Material									
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Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence
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DART AEROSPACE LTD				Work Order: 113850	
Description: 206 Saddle, Outboard, Left side				Part Number: D2667-1	
Inspection Dwg: D2667 Rev: D DSK: Rev:				Page 1 of 1	

FIRST ARTICLE INSPECTION DIMENSION SHEET

Dim	Min	Max	Go/No Go Gauge	Record Actual Dimensions				
				1	2	3	4	5
A	0.100	0.140		.122	.122	.123	.120	.123
B	0.100	0.140		.114	.118		.120	.118
C	1.125	1.145		1.1366	1.133	1.1352	1.1343	1.137
D	0.615	0.685		.650	.650	.650	.650	.650
E	0.240	0.260		.251	.251		.253	.251
F	1.313	1.343		1.326	1.326	1.326	1.326	1.326
G	0.210	0.230		.222	.221	.222	.222	.223
H	0.100	0.180		.140	.140	.140	.140	.140
I	2.470	2.510		2.493	2.495	2.495	2.495	2.495
J	1.565	1.585		1.575	1.573	1.572	1.5735	1.573
K	0.235	0.240		.238	.238		.238	.238
L	0.100	0.120		.115	.110		.109	.110
M	0.990	1.010		.995	.995	.995	.995	.995
N	0.510	0.515		.513	.513	.513	.513	.513
O	5.990	6.010		6.000	6.000	6.000	6.000	6.000
P	1.245	1.255		1.248	1.248	1.248	1.248	1.248
Q	2.495	2.505		2.498	2.498	2.498	2.498	2.498
R	0.312	0.318		.314	.314	.314	.314	.314
S	0.315	0.322		.316	.316	.316	.316	.316
T	1.995	2.005		2.000	1.998	1.999	2.000	2.000
U	1.357	1.367		1.360	1.361	1.360	1.360	1.360
V	0.787	0.807		.791	.791		.791	.791
W	1.040	1.060		1.046	1.048		1.047	1.047
X	1.674	1.679		1.676	1.678	1.677	1.678	1.677
Y	0.256	0.262		.258	.258	.258	.258	.258
Z	0.912	0.932		.921	.921		.921	.921
AA	0.490	0.510		.4985	.5005		.499	.499
AB	0.178	0.198		.188	.188	.188	.188	.188
AC								
AD								
AE								

Accept/Reject

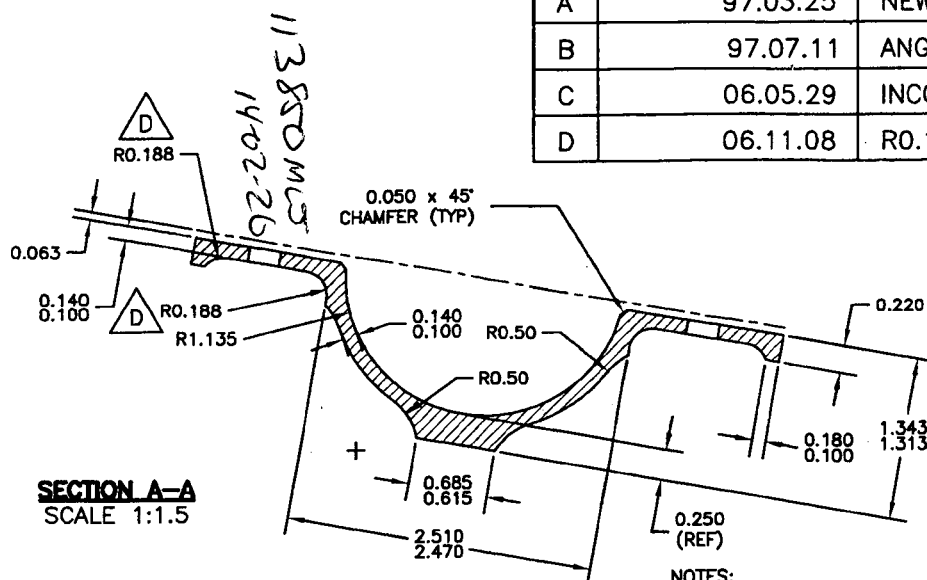
Scrap

Measured by: <i>SS</i>	Date: 14-03-04
Audited by: <i>my</i>	Date: 14/03/07
Prototype Approval:	Date:

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	99.04.19	Incorporated DSI 9095, DSI 9102 & DSI 9122 Rev. A	RF	
C	99.11.11	Added Dim. R-T	RF	
D	02.12.12	Reformat; Added Dim. U-W & DT8683, DT8686	KJ/RF	
E	06.07.05	Revised per drawing revision C	KJ/JLM	
F	07.03.21	Revised per drawing revision D	KJ/JLM	
G	12.03.08	Revised dimensions R and Y	KJ	<i>AA</i>



DESIGN #	DRAWN BY CB	DART AEROSPACE USA, INC. PORT HADLOCK, WA	
CHECKED PH	APPROVED #	DRAWING NO. D2667	REV. D SHEET 1 OF 1
DATE 06.11.08		TITLE SADDLE AFT OUTSIDE HIGH	SCALE 1:3
A	97.03.25	NEW ISSUE	
B	97.07.11	ANGLE AND NOTES ADDED	
C	06.05.29	INCORPORATE DEO 9122, 9102, 9095	
D	06.11.08	R0.188 WAS R0.30; Ø0.316 WAS Ø0.313	

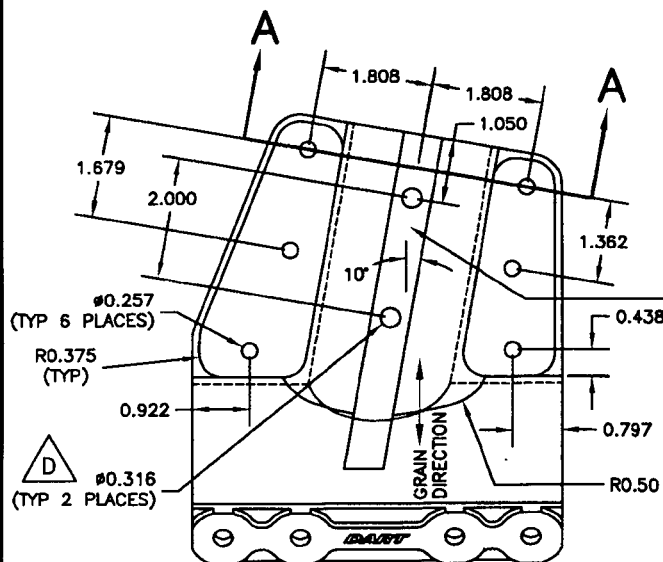


RELEASE

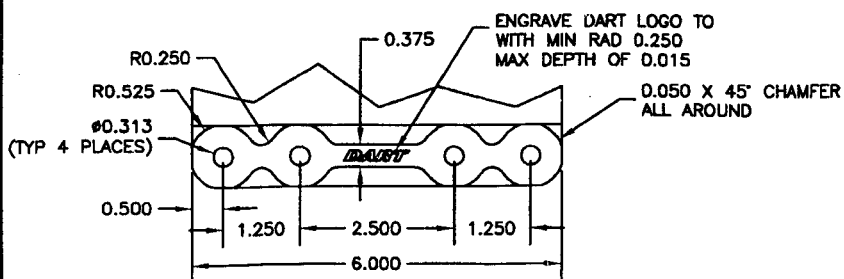
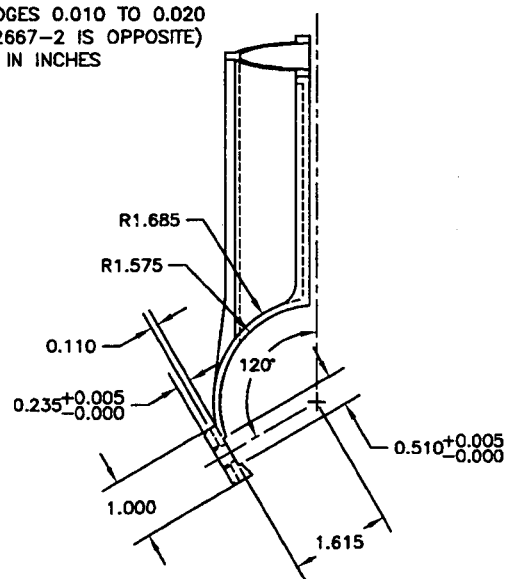
07-2-12

NOTES:

- 1) MATERIAL: ALUMINUM 7075-T7351 (QQ-A-250/12)
(MAKE FROM D6101-003 SADDLE BILT, 7075)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT GLOSS WHITE (4.3.5.1) PER DART QSI 005 4.3
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) BREAK ALL SHARP EDGES 0.010 TO 0.020
- 5) D2667-1 SHOWN (D2667-2 IS OPPOSITE)
- 6) ALL DIMENSIONS ARE IN INCHES



ENGRAVE PART
NUMBER AND
BATCH NUMBER
TO MAX DEPTH
OF 0.010 WITH
MIN RADIUS
OF 0.010



D2667-1 SADDLE AFT OUTSIDE HIGH

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